



**Kawasaki**

**Z750R**  
**Z750R ABS**



# **Motorcycle Assembly & Preparation Manual**



# Foreword

In order to ship Kawasaki vehicles as efficiently as possible, they are partially disassembled before crating. Since some of the most commonly removed parts have a direct bearing on a vehicle's reliability and safety, conscientious pre-sale assembly and preparation becomes extremely important. Good setup procedures can prevent needless warranty claims and give customers a greater sense of confidence in Kawasaki and their Kawasaki Dealers.

This Assembly and Preparation Manual explains step by step procedures of the following items for all Kawasaki Z750R and Z750R ABS.

1. Uncrating
2. Assembly
3. Preparation

The selling dealer assumes sole responsibility for any unauthorized modifications prior to sale. Refer to your Service Binder for any Service Bulletins specifying Factory Directed Modifications (Special Claims) which must be performed before the vehicle is ready for sale.

Whenever you see the following symbols heed their instructions! Always follow safe operating and maintenance practices.

## **DANGER**

**DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.

## **WARNING**

**WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.

## **CAUTION**

**CAUTION** indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

## **NOTICE**

**NOTICE** is used to address practices not related to personal injury.

## **NOTE**

○ *This note symbol indicates points of particular interest for more efficient and convenient operation.*

Kawasaki Heavy Industries, Ltd. accepts no liability for any inaccuracies or omissions in this publication, although every possible measure has been taken to make it as complete and accurate as possible. All procedures and specifications subject to change without notice.

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# Uncrating

## Opening Crate

### ⚠ WARNING

Crates have sharp edges and may have nails or screws that can cause cuts and injury. Always wear protective gloves, boots and eye protection when uncrating to prevent injury.



MC03003B S

### ⚠ WARNING

The steel crate panel plates and fasteners have sharp edges. Always wear protective gloves, boots and eye protection when uncrating to prevent injury.



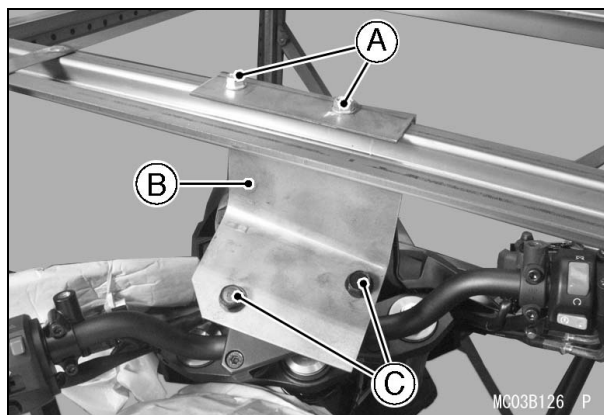
MC03004B S

- Clear a space about 6 m (20 ft) square to give yourself plenty of space to work.
- Place the crate upright on its base.
- Remove the cardboard cover.
- Remove the parts box.

### NOTICE

When removing the crate bracket from the motorcycle, be careful not to drop any parts or the bracket onto the fuel tank and other components, and not to scratch the fuel tank or other components with the crate bracket.

- First, remove the lower bolts (D = 12, L = 16) (2) at the handlebar holder and discard them.
- Remove the upper bolts (D = 8, L = 12) (2) to take off the crate bracket and discard them.



A. Upper Bolts (D = 8, L = 12)

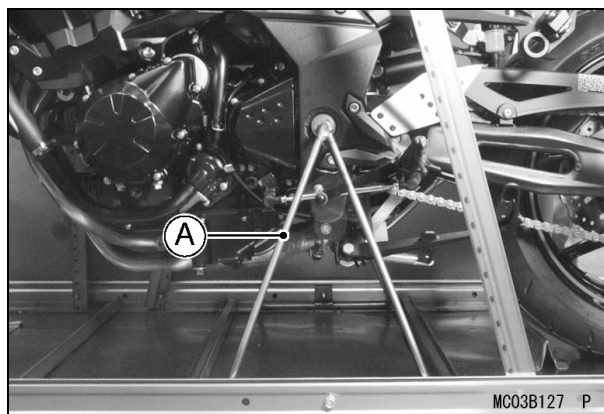
B. Crate Bracket

C. Lower Bolts (D = 12, L = 16)

- Take out all the bolts and screws and remove the top and sides of the crate.

### NOTE

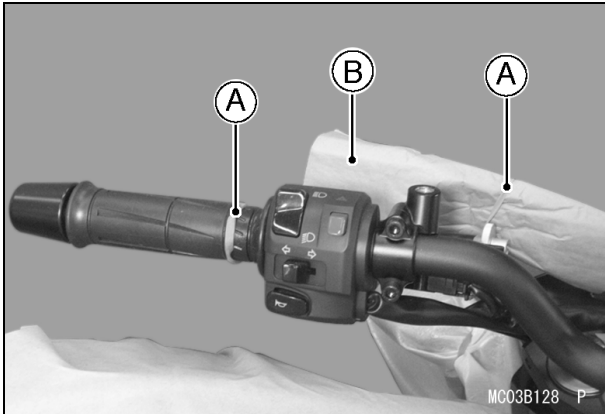
- Remove the dummy bolts after rolling the vehicle off the crate base.
- Lift the vehicle upward about 10 cm (4 in.) and remove the left and right lower support brackets. Roll the vehicle off the crate base.



A. Lower Support Bracket (Left)

- Remove a rubber band from the clutch lever end and discard it.
- Remove a rubber band and the protective cover from the clutch cable and discard it.

## 4 UNCRATING

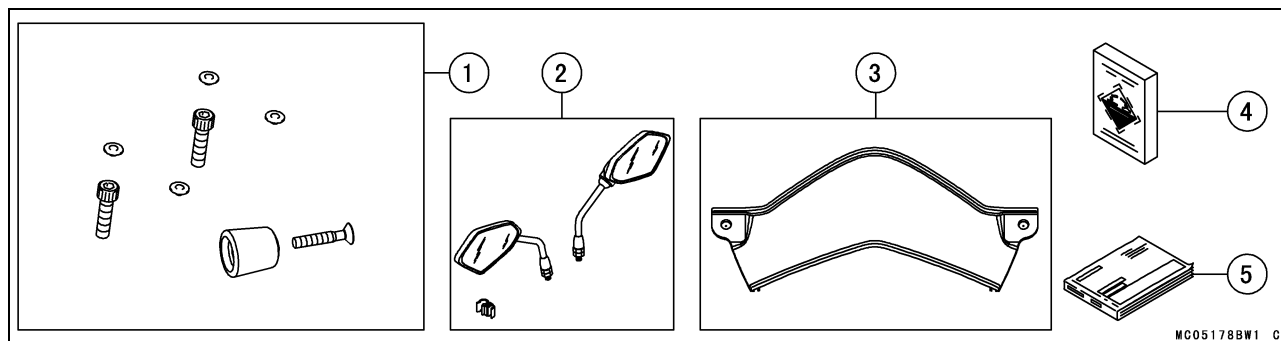


**A. Rubber Band**

**B. Protective Cover**

## Parts Check

- Open the parts box, and check the parts against the illustrations. There may be minor differences between these illustrations and the actual vehicle parts. In the following charts under Remarks, D = diameter in millimeters, and L = length in millimeters.



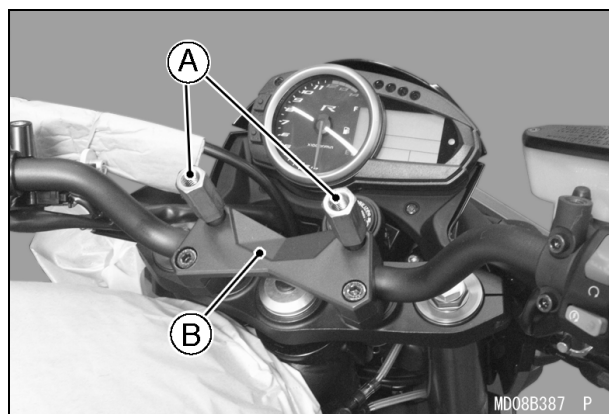
No.	Part Name	Qty	Remarks
1	Weight, Handlebar	1	
	Weight Screw, Handlebar	1	D = 8, L = 45
	Handlebar Clamp Bolt, Socket	2	D = 8, L = 30
	Plastic Plug, Clamp Bolt	4	D = 14.5
2	Rear View Mirror, LH & RH	2	
	Wiring Clamp, Plastic	1	
3	Cover, Seat Under	1	
4	Battery Electrolyte, YTX9-BS	1	12 V 8 Ah
5	Owner's Manual	1	

## Assembly

### Handlebar

#### Handlebar Installation

- Remove the dummy bolts (2) from the handlebar clamp and discard them.

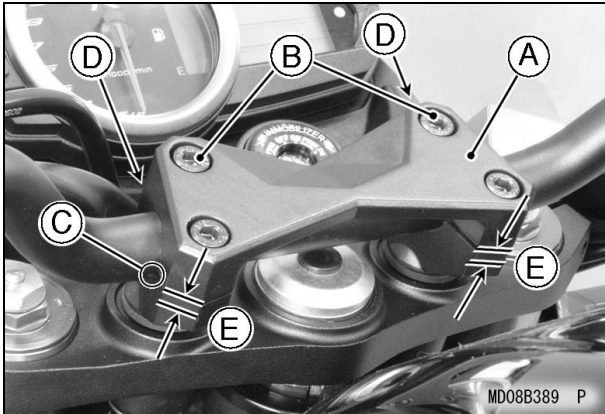


**A. Dummy Bolts**

**B. Top Handlebar Clamp**

- Check the handlebar position so that its punched mark is aligned with the upper rear edge of the lower handlebar clamp and install the handlebar clamp bolts (D = 8, L = 30) (2) at the front.
- If the handlebar position is not correctly aligned, set the handlebar to the correct position.

## 6 ASSEMBLY



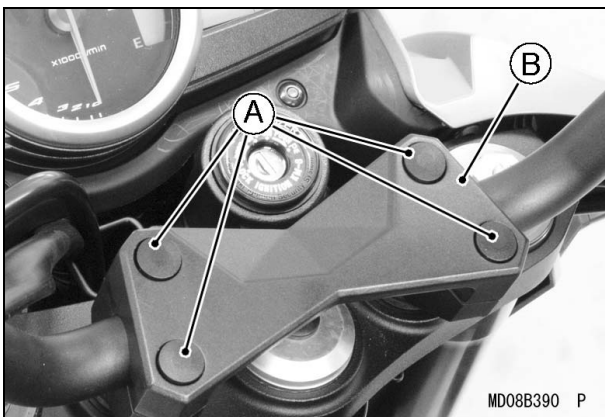
- A. Top Handlebar Clamp**
- B. Handlebar Clamp Bolts (D = 8, L = 30)**
- C. Punched Mark**
- D. No Gap**
- E. Gap**

### *Handlebar Clamp Bolt Tightening*

- Tighten the front handlebar clamp bolts first, and then the rear handlebar clamp bolts to the specified torque. There will be a gap at the rear part of the clamp after tightening.

**Torque: 25 N·m (2.5 kgf·m, 18 ft·lb)**

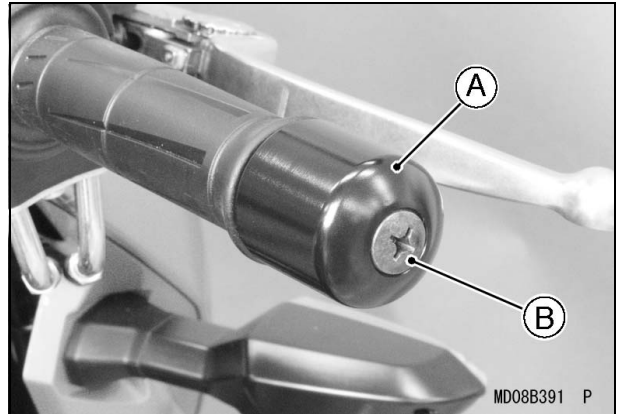
- Push the plastic plugs (4) into the handlebar clamp bolts.



- A. Plastic Plugs**
- B. Top Handlebar Clamp**

### **Handlebar Weight**

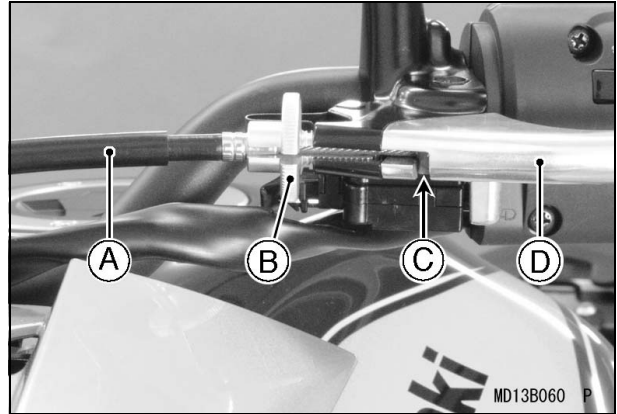
- Install the handlebar weight on the right end of the handlebar with the screw (D = 8, L = 45) with the non-permanent locking agent and tighten it.



- A. Handlebar Weight (Right)**
- B. Screw (D = 8, L = 45)**

### **Clutch Cable**

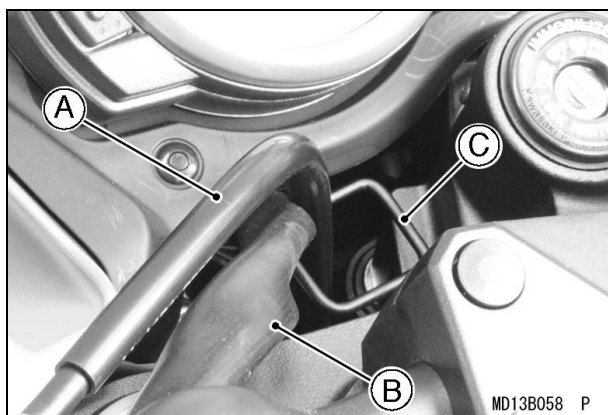
- Apply a light coat of grease on the clutch inner cable.
- Line up the slots on the clutch lever and adjuster.
- Fit the tip of the clutch inner cable into the lever socket, slide the inner cable through the slots, and release the outer cable into the adjuster.



- A. Clutch Cable**
- B. Adjuster**
- C. Cable Tip**
- D. Clutch Lever**

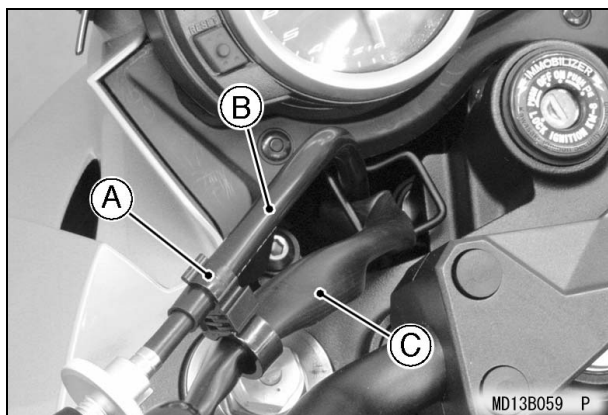
- Make sure the clutch cable and the left switch housing harness are routed in the clamp (steel) as shown.





- A. Clutch Cable**
- B. Left Switch Housing Harness**
- C. Cable/Wiring Clamp (Steel)**

- Fasten the clutch cable and switch housing harness with the wiring clamp (plastic) from the rear of the vehicle.



- A. Wiring Clamp (Plastic)**
- B. Clutch Cable**
- C. Left Switch Housing Harness**

## Rear View Mirrors (Left and Right)

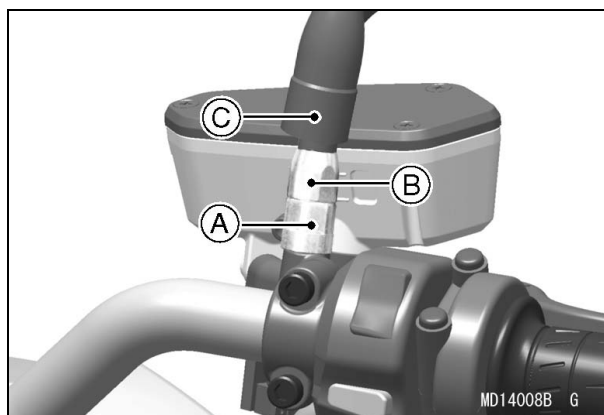
- Slide up the rubber boot.
- Screw the mounting area of the right rear view mirror into the holder all the way, and tighten the lower hexagonal area securely.
- Tighten the lower and upper hexagonal area to the specified torque.

### Lower Hexagonal Area Torque:

30 N·m (3.1 kgf·m, 22 ft·lb)

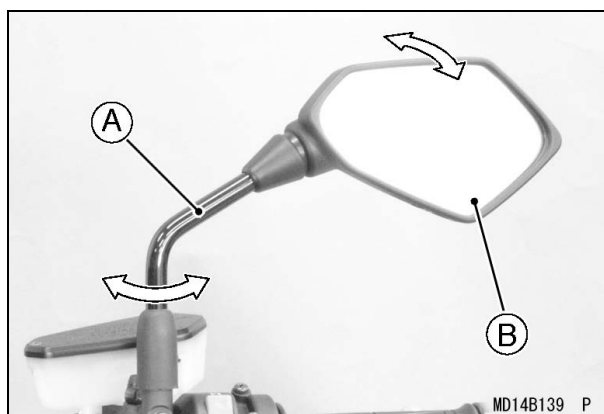
### Upper Hexagonal Area Torque:

18 N·m (1.8 kgf·m, 13 ft·lb)



- A. Lower Hexagonal Area for Tightening**
- B. Upper Hexagonal Area (Adapter)**
- C. Rubber Boot**

- Reinstall the rubber boot.
- Turn the stay to assure visibility to the rear with the operator sitting on the motorcycle.
- Adjust the rear view mirror by slightly moving only the mirror portion of the assembly.



- A. Stay**
- B. Mirror**

- Installation and adjustment of the left side mirror is common with the right side. Follow the procedure specified for the right side.

## Seat Under Cover

- Install the seat under cover (see the "Coolant" section in the PREPARATION chapter).

### NOTE

- It is recommended that the seat under cover should be installed after completing the steps in the "Coolant" section in the PREPARATION chapter.

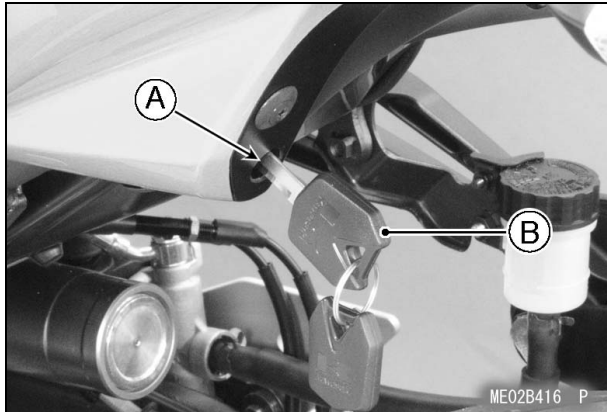
# Preparation

## Battery Service

### Battery Removal

The battery used in this motorcycle is a sealed type and never needs to be refilled. Follow the procedure for activating a new battery to ensure the best possible battery performance.

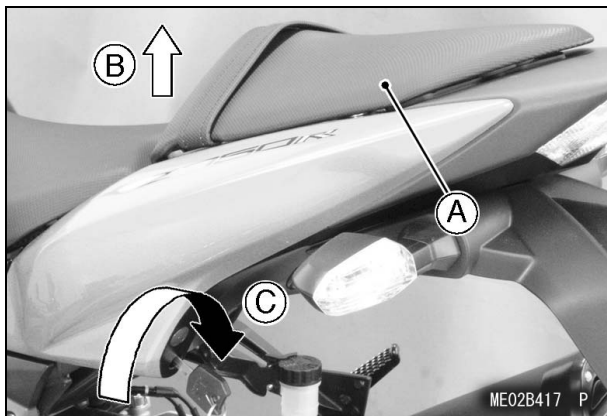
- Insert the ignition key into the seat lock located under the left seat cover (rear fairing).



**A. Seat Lock**

**B. Ignition Key**

- Turn the key clockwise while pulling up the passenger's seat.

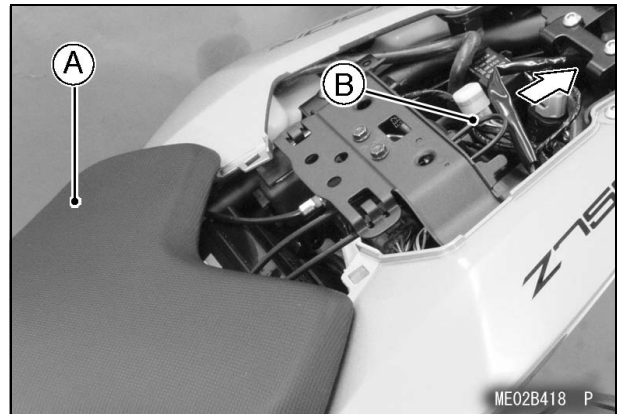


**A. Passenger's Seat**

**B. Pull up**

**C. Turn the Key**

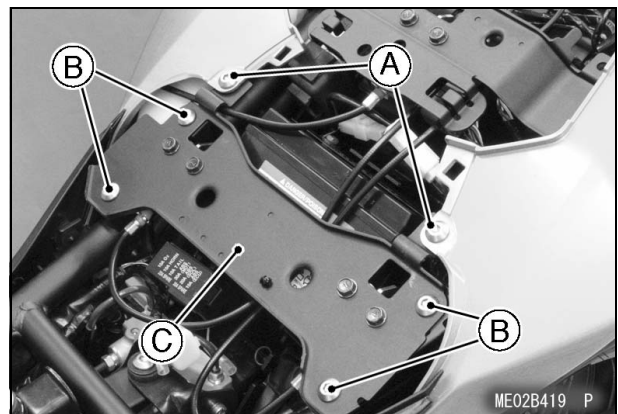
- Pull the rider's seat lock cable ring, and then remove the rider's seat by pulling the rear of it up and backward.



**A. Rider's Seat**

**B. Seat Lock Cable Ring**

- Remove the seat under cover mounting bolts (D = 6, L = 18) (2).
- Remove the seat bracket mounting bolts (D = 6, L = 14) (4), then move the seat bracket.

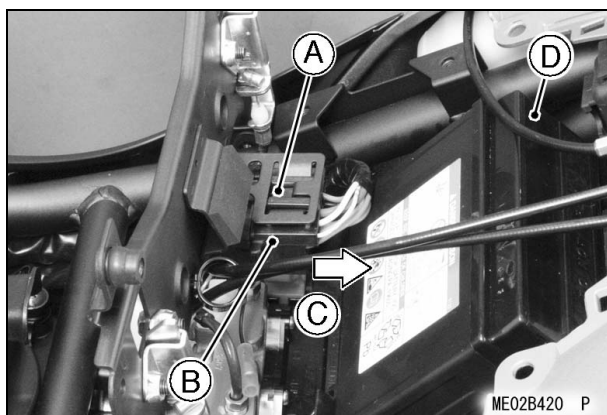


**A. Seat Under Cover Mounting Bolts (D = 6, L = 18)**

**B. Seat Bracket Mounting Bolts (D = 6, L = 14)**

**C. Seat Bracket**

- Push the stopper and pull the fuse box from the seat bracket.
- Take the battery out of the battery case.



- A. Stopper
- B. Fuse Box
- C. Pull
- D. Battery

- Clean the terminals.

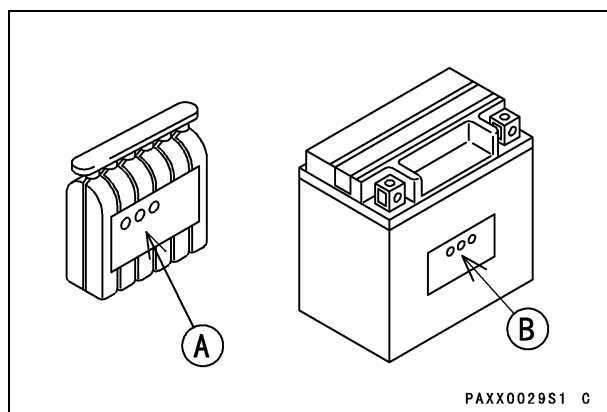
## Battery Activation

### Electrolyte Filling

- Make sure that the model name of the electrolyte container matches the model name of the battery. These names must be the same.

### Battery Model Name

**ZR750NBF/PBF: YTX9-BS**



- A. Model Name of the Electrolyte
- B. Model Name of the Battery

## Battery Specifications

Make	GS Yuasa
Battery Type	YTX9-BS
Battery Capacity	12 V 8 Ah
Electrolyte Capacity	0.40 L
Battery/Electrolyte Set P/No.	26012-0088

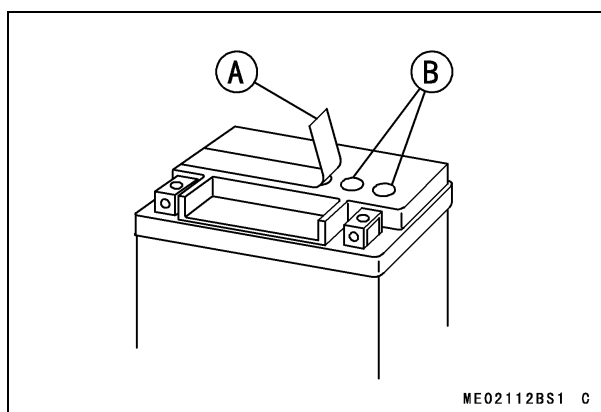
## NOTICE

**Do not remove the aluminum sealing sheet from the filler ports until just prior to use. Be sure to use the dedicated electrolyte container for correct electrolyte volume.**

- Place the battery on a level surface.
- Check to see that the sealing sheet has no peeling, tears, or holes in it.
- Remove the sealing sheet.

## NOTE

- The battery is vacuum sealed. If the sealing sheet has leaked air into the battery, it may require a longer initial charge.



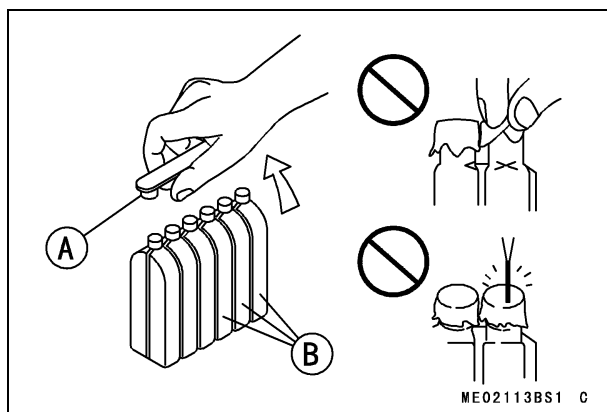
- A. Sealing Sheet
- B. Filler Ports

- Remove the electrolyte container from the vinyl bag.
- Detach the strip of caps from the container and set aside, these will be used later to seal the battery.

## NOTE

- Do not pierce or otherwise open the sealed cells of the electrolyte container. Do not attempt to separate individual cells.

## 10 PREPARATION



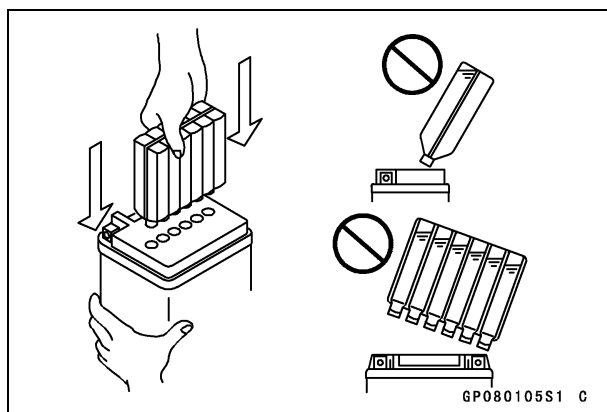
### A. Strip of Caps

### B. Sealed Cells

- Place the electrolyte container upside down with the six sealed cells into the filler ports of the battery. Hold the container level, push down to break the seals of all six cells. You will see air bubbles rising into each cell as the ports fill.

### NOTE

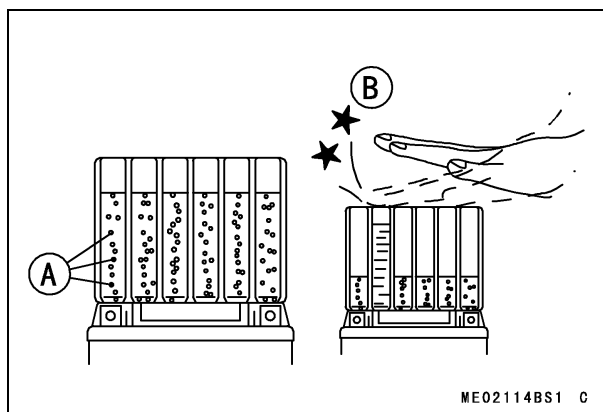
- Do not tilt the electrolyte container.



- Check the electrolyte flow.
- If no air bubbles are coming up from the filler ports, or if the container cells have not emptied completely, tap the container a few times.

### NOTE

- Be careful not to have the battery fall down.



### A. Air Bubbles

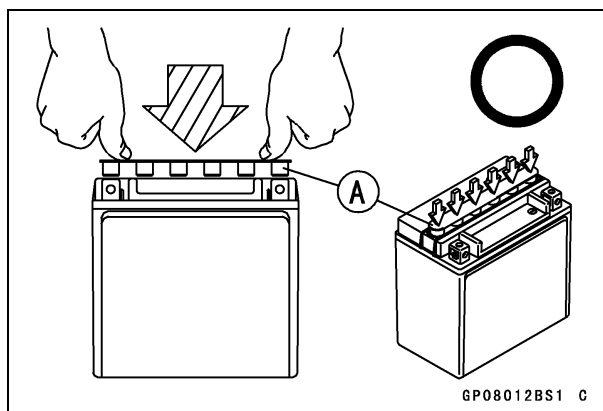
### B. Tap the Container

- Keep the container in place. Don't remove the container from the battery, the battery requires all the electrolyte from the container for proper operation.

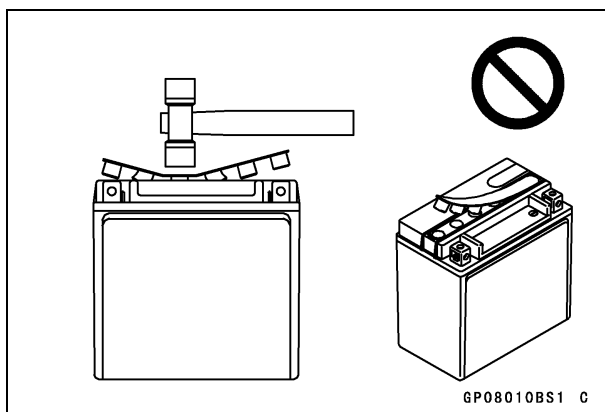
### NOTICE

**Removal of the container before it is completely empty can shorten the service life of the battery.**

- After filling, let the battery sit for **20 ~ 60** minutes with the electrolyte container kept in place, which is required for the electrolyte to fully permeate into the plates.
- Make sure that the container cells have emptied completely, and remove the container from the battery.
- Place the strip of caps loosely over the filler ports, press down firmly with both hands to seat the strip of caps into the battery (don't pound or hammer). When properly installed, the strip of caps will be level with the top of the battery.



### A. Strip of Caps



### NOTICE

Once the strip of caps is installed onto the battery, never remove the caps, nor add water or electrolyte to the battery.

### NOTE

- Charging the battery immediately after filling can shorten service life.

#### Initial Charge

- Newly activated sealed batteries require an initial charge.

**Standard Charge: 0.9 A × 5 ~ 10 hours**

- If using a recommended battery charger, follow the charger's instructions for newly activated sealed battery.

#### Kawasaki-recommended chargers:

**Battery Mate 150-9**

**OptiMate PRO 4-S/PRO S/PRO 2**

**Yuasa MB-2040/2060**

**Christie C10122S**

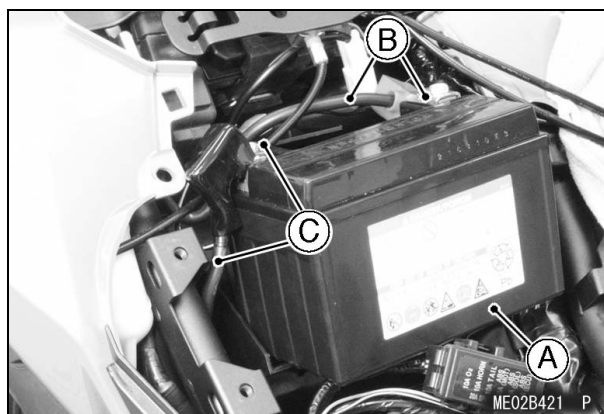
- If the above chargers are not available, use equivalent one.
- Let battery sit **30** minutes after initial charge, then check voltage using a voltmeter. (Voltage immediately after charging becomes temporarily high. For accurate measuring, let the battery sit for given time.)

### NOTE

- Charging rates will vary depending on how long the battery has been stored, temperature, and the type of charger used. If voltage is not at least 12.8 volts, repeat charging cycle.
- To ensure maximum battery life and customer satisfaction, it is recommended the battery be load tested at three times its amp-hour rating for 15 seconds. Re-check voltage and if less than 12.8 volts repeat the charging cycle and load test. If still below 12.8 volts the battery is defective.

#### Battery Installation

- Turn the ignition switch OFF.
- Place the battery upright on the battery case with the terminal faces to the rear.
- Route the battery cables as shown, and first connect the red capped positive cable to the (+) terminal, and then negative cable to the (-) terminal.
- Put a light coat of grease on the terminals to prevent corrosion.
- Cover the terminals with their protective caps.



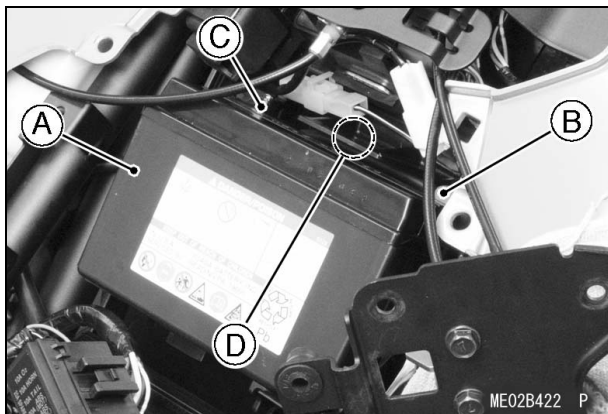
#### A. Battery

#### B. Positive Cable (+)

#### C. Negative Cable (-)

- Throw down the battery to a rear side and route the (+) cable through the guide in the battery case.
- Position the (-) negative lead connector at the rear of the battery.

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- A. Battery
- B. Positive Cable (+)
- C. Negative Cable (-)
- D. Route the (+) cable through the guide in the battery case.

- Install the fuse box, seat bracket, seat under cover and rider's and passenger's seats (see the "Coolant" section in the PREPARATION chapter).

### NOTE

- It is recommended that the fuse box, seat bracket, seat under cover and rider's and passenger's seats should be installed after completing the steps in the "Coolant" section in the PREPARATION chapter.

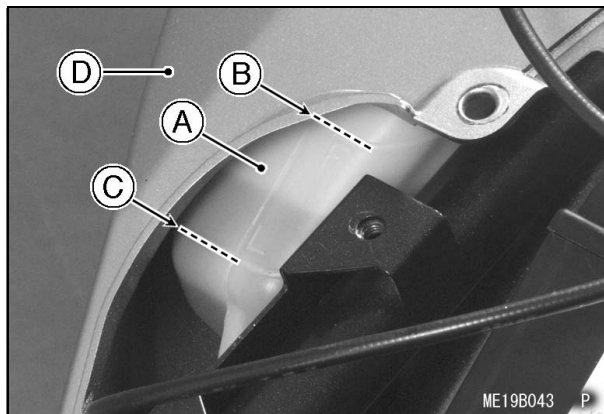
## Coolant

### Coolant Level Inspection

- Situate the motorcycle so that it is perpendicular to the ground.
- Remove the rider's and passenger's seats, seat under cover, seat bracket and fuse box (see the "Battery Service" section in the PREPARATION chapter).
- Check the coolant level through the coolant level gauge on the reserve tank located in the inside of the right seat cover. The coolant level should be between the F (Full) and L (Low) level lines.

### NOTE

- Check the level when the engine is cold (room or atmospheric temperature).

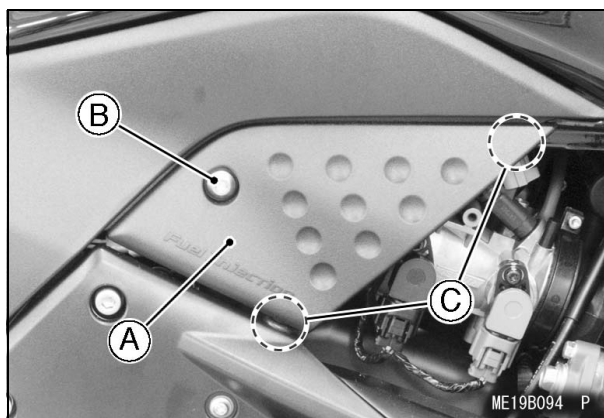


- A. Reserve Tank
- B. F (Full) Level Line
- C. L (Low) Level Line
- D. Seat Cover (Right)

- If the amount of coolant is insufficient, remove the sub right side cover, right side cover and right seat cover (rear fairing) and add coolant into the reserve tank.

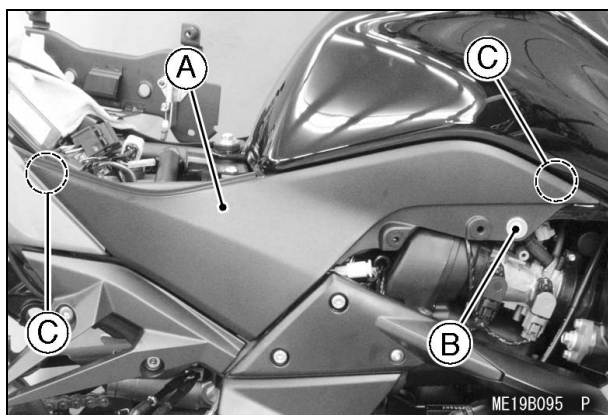
### Coolant filling

- Remove the mounting bolt (D = 6, L = 18) and remove the sub-right side cover by pulling it out and up to clear the projections.



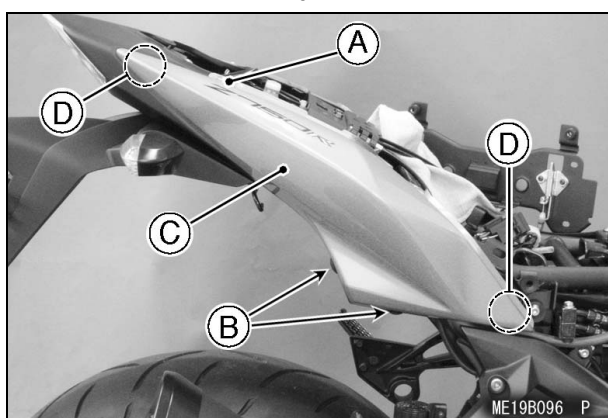
- A. Sub-Right Side Cover
- B. Bolt (D = 6, L = 18)
- C. Projections

- Remove the mounting bolt (D = 5, L = 16) and flat washer (D = 20) and remove the right side cover by pulling it outward to clear the projections.



- A. Right Side Cover**  
**B. Bolt (D = 5, L = 16) and Flat Washer (D = 20)**  
**C. Projections**

- Remove the mounting bolt (D = 6, L = 14) and the screw rivets (2) from the right seat cover (rear fairing).
- Remove the right seat cover by pulling it outward to clear the projections.

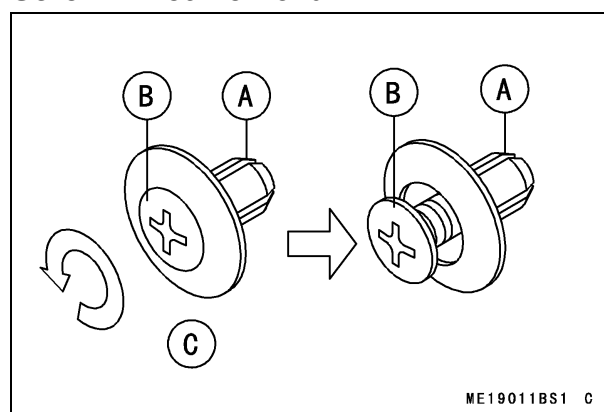


- A. Bolt (D = 6, L = 14)**  
**B. Screw Rivets**  
**C. Seat Cover (Right)**  
**D. Projections**

### NOTE

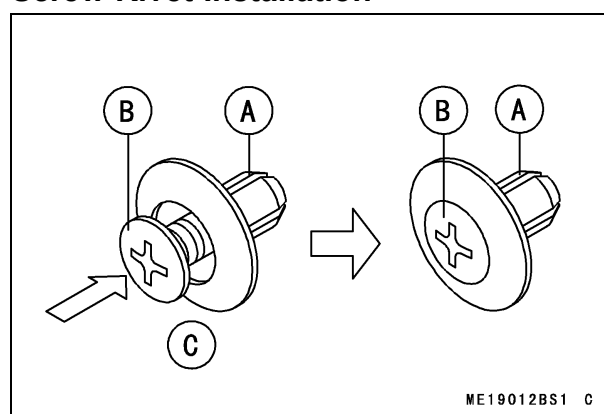
- The seat cover (rear fairing) uses the screw rivets. The screw rivets can be removed by turning the central pin with the screw driver, and when installing them, pull the central pin fully up first, and then push in the central pin after inserting the screw rivet.

### Screw Rivet Removal



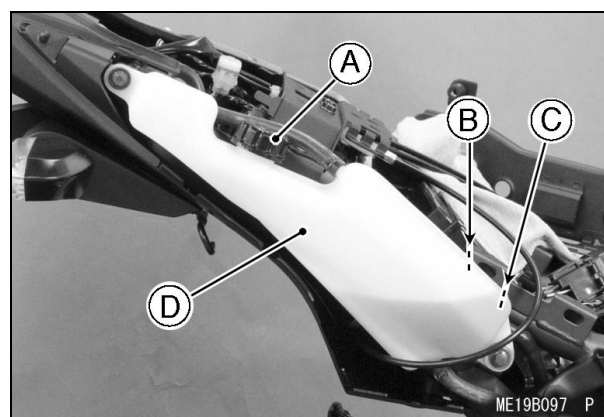
- A. Screw Rivet**  
**B. Central Pin**  
**C. Turn the screw rivet.**

### Screw Rivet Installation



- A. Screw Rivet**  
**B. Central Pin**  
**C. Push in.**

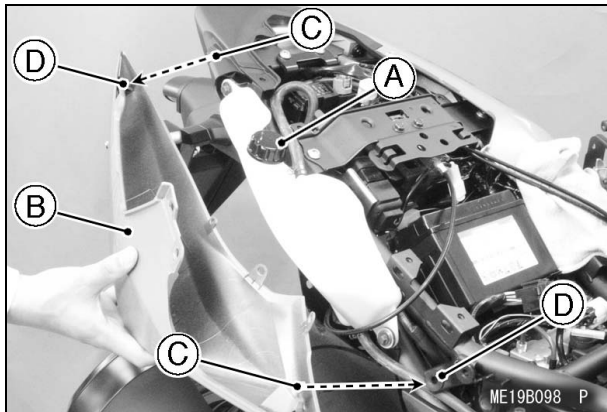
- Remove the cap from the reserve tank and add coolant through the filler opening to the F (Full) level line.



- A. Cap**  
**B. F (Full) Level Line**  
**C. L (Low) Level Line**  
**D. Reserve Tank**

## 14 PREPARATION

- Install the cap.
- Insert the projections of the right seat cover into the grommets.



- A. Cap**
- B. Seat Cover (Right)**
- C. Projections**
- D. Grommets**

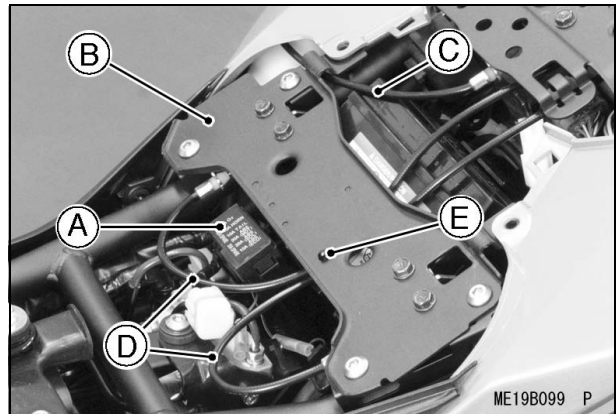
- Reinstall the right seat cover mounting bolt (D = 6, L = 14) and screw rivets (2), and tighten the bolt.
- Reinstall the right side cover, mounting bolt (D = 5, L = 16) and flat washer (D = 20), and tighten the bolt.
- Reinstall the sub-right side cover and mounting bolt (D = 6, L = 18), and tighten the bolt.

### NOTE

- A permanent type of antifreeze is installed in the cooling system when shipped. It is colored green and contains ethylene glycol. It is mixed at 50% and has the freezing point of  $-35^{\circ}\text{C}$  ( $-31^{\circ}\text{F}$ ).

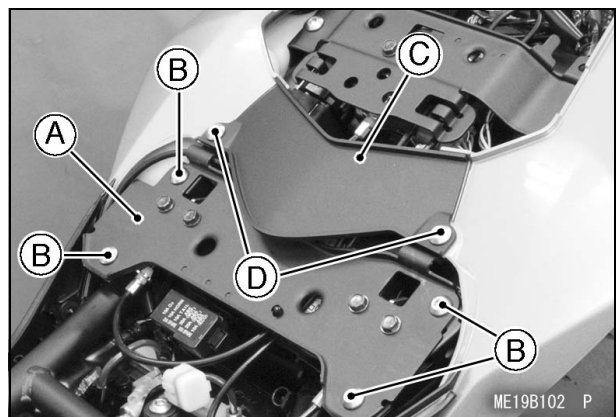
### Rider's Seat Installation

- Reinstall the fuse box to the seat bracket.
- Route the passenger's seat lock cable through the guide of the seat bracket at the rear as shown.



- A. Fuse Box**
- B. Seat Bracket**
- C. Passenger's Seat Lock Cable**
- D. Rider's Seat Lock Cables**
- E. Clamp (Plastic) – Route the rider's seat lock cables in the clamp.**

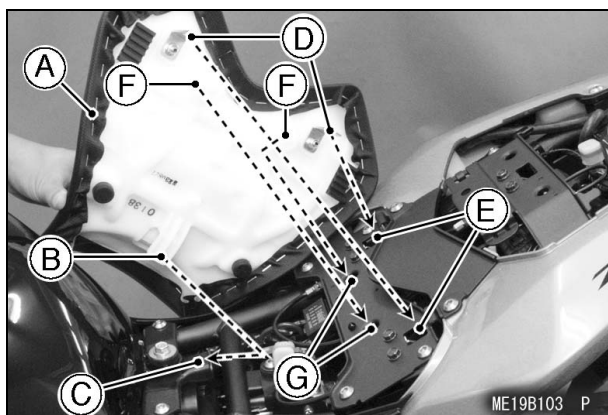
- Reinstall the seat bracket and mounting bolts (D = 6, L = 14) (4), and tighten them.
- Install the seat under cover on the seat cover (rear fairing) and mounting bolts (D = 6, L = 18) (2), and tighten them.



- A. Seat Bracket**
- B. Seat Bracket Mounting Bolts (D = 6, L = 14)**
- C. Seat Under Cover**
- D. Seat Under Cover Mounting Bolts (D = 6, L = 18)**

- Insert the tab on the front of the rider's seat into the slot in the fuel tank bracket.
- Insert the hooks at the rear of the rider's seat into the latches, projections into the holes, and push down the rear part of the rider's seat until the lock clicks.



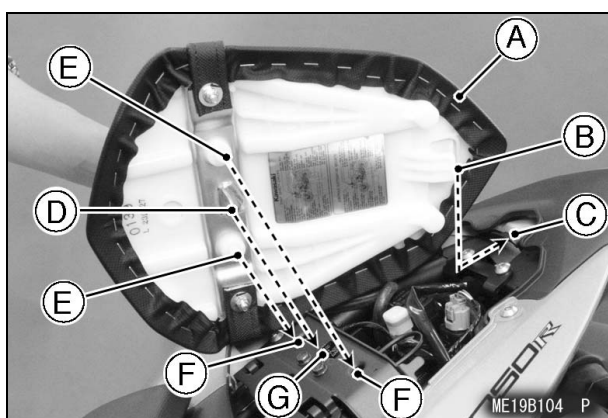


- A. Rider's Seat**
- B. Tab**
- C. Slot**
- D. Hooks**
- E. Latches**
- F. Projections**
- G. Holes**

- Pull up the rider's seat to make sure it is securely locked.

#### *Passenger's Seat Installation*

- Insert the tab on the rear of the passenger's seat into the slot in the frame.
- Insert the hook at the front of the passenger's seat into the latch, left and right projections into the holes, and push down the front part of the passenger's seat until the lock clicks.



- A. Passenger's Seat**
- B. Tab**
- C. Slot**
- D. Hook**
- E. Projections**
- F. Holes**
- G. Latch**

- Pull up the passenger's seat to make sure it is securely locked.
- Pull out the ignition key from the seat lock.

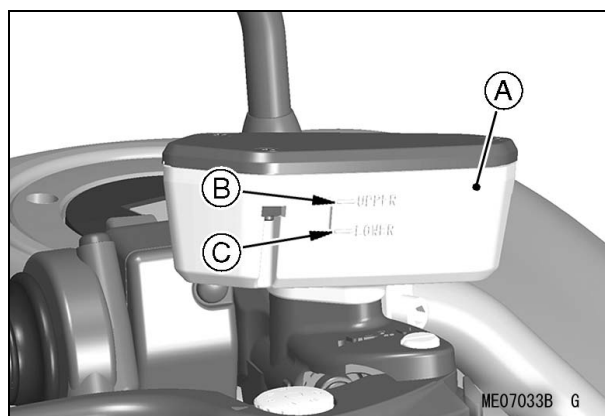
#### **NOTE**

- If there is difficulty removing the ignition key from the seat lock, turn it lightly counterclockwise while pulling it out.

### **Front Brake Fluid**

#### *Front Brake Fluid Level Inspection*

- With the front brake fluid reservoir held horizontal, check that the fluid level is between the upper and lower level lines.



- A. Front Brake Fluid Reservoir**
- B. Upper Level Line**
- C. Lower Level Line**

- If the fluid level in the reservoir is lower than the lower level line, check for fluid leaks in the front brake lines and fill the reservoir.
- Loosen the screws to remove the front brake fluid reservoir cap and diaphragm.
- Fill the reservoir to the upper level line with DOT4 brake fluid, reinstall the diaphragm and reservoir cap.
- Tighten the screws to the specified torque.

**Torque: 1.5 N·m (0.15 kgf·m, 13 in·lb)**

**⚠ WARNING**

Brake fluid that is contaminated by moisture or dirt, mixed or contains air has a lower boiling point and can cause the brake to be ineffective or fail, and it may cause rubber parts to deteriorate, resulting in an accident causing injury or death. Never reuse old brake fluid. Do not use fluid from a container that has been left unsealed or that has been open for a long time. Do not mix two types and brands of fluid for use in the brake. Don't leave the reservoir cap off for any length of time to avoid moisture contamination of the fluid. Don't add or change the fluid in the rain or when a strong wind is blowing.

**NOTICE**

Brake fluid quickly ruins painted surfaces. Wipe up any spilled fluid immediately.

- Operate the brake lever several times.
- If it feels spongy, there might be air in the brake line.
- If necessary, bleed the air in the front brake line.
- Also check for fluid leakage around the fittings.

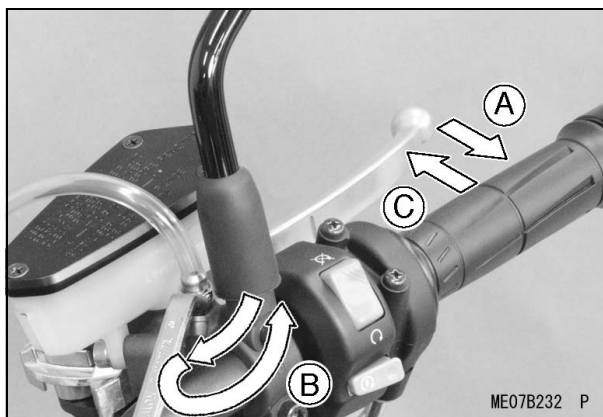
**Front Brake Line Air Bleeding**

- Loosen the screws to remove the front brake fluid reservoir cap and diaphragm, and check that there is plenty of fluid in the reservoir.

**NOTE**

○ The fluid level must be checked several times, during the bleeding operation and replenished as necessary. If the fluid in the reservoir runs completely out any time during bleeding, the bleeding operation must be repeated from the beginning since air will have entered the line.

- Attach a clear plastic hose to the bleed valve on the front master cylinder and run the other end of the hose into a container.
- With the reservoir cap off, slowly pump the brake lever several times until no air bubbles can be seen rising up through the fluid from the holes at the bottom of the reservoir. This bleeds the air from the brake master cylinder end of the line.
- Pump the brake lever a few times until it becomes hard and then, holding the lever squeezed, quickly open (turn counterclockwise) and close the bleed valve. Then release the lever. Repeat this operation until no more air can be seen coming out into the plastic hose.

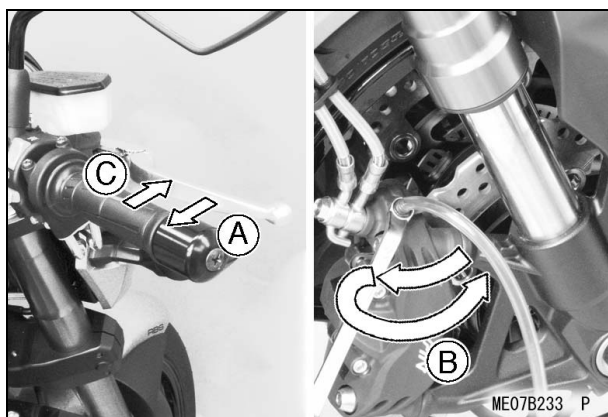


- Hold the brake lever applied.
- Quickly open and close the bleed valve on the front master cylinder.
- Release the brake lever.

- Tighten the bleed valve to the specified torque.

**Torque: 7.8 N·m (0.80 kgf·m, 69 in·lb)**

- Attach a clear plastic hose to the bleed valve on each front brake caliper and run the other end of the hose into a container.
- With the reservoir cap off, slowly pump the brake lever several times until no air bubbles can be seen rising up through the fluid from the holes at the bottom of the reservoir. This bleeds the air from the brake master cylinder end of the line.
- Pump the brake lever a few times until it becomes hard and then, holding the lever squeezed, quickly open (turn counterclockwise) and close the bleed valve. Then release the lever. Repeat this operation until no more air can be seen coming out into the plastic hose.



- A. Hold the brake lever applied.
- B. Quickly open and close the bleed valve on the front brake caliper.
- C. Release the brake lever.

- Repeat the previous step one more time for the other front disc brake.
- When air bleeding is finished, check that the fluid level is between the upper and lower level lines.
- Reinstall the diaphragm and reservoir cap.
- Tighten the screws to the specified torque.

**Torque: 1.5 N·m (0.15 kgf·m, 13 in·lb)**

- Tighten the bleed valve(s) to the specified torque.

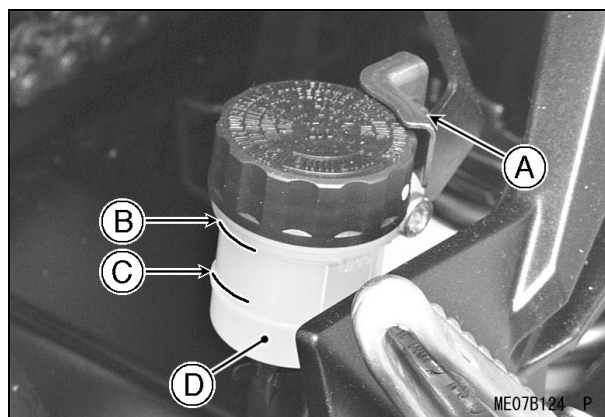
**Torque: 7.8 N·m (0.80 kgf·m, 69 in·lb)**

- Apply the brake forcefully for a few seconds, and check for fluid leakage around the fittings.

## Rear Brake Fluid

### Rear Brake Fluid Level Inspection

- With the rear brake fluid reservoir held horizontal, check that the fluid level is between the upper and lower level lines.



- A. Reservoir Cap Stopper Screw
- B. Upper Level Line
- C. Lower Level Line
- D. Rear Brake Fluid Reservoir

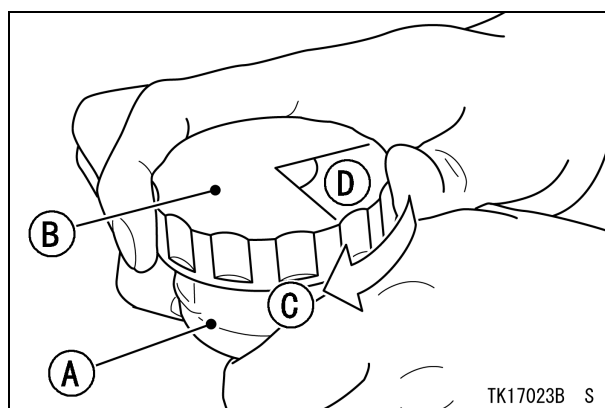
- If the fluid level in the reservoir is lower than the lower level line, check for fluid leaks in the brake line, and fill the reservoir.
- Loosen the reservoir cap stopper screw to remove the reservoir cap and diaphragm.
- Fill the reservoir to the upper level line with DOT4 brake fluid, reinstall the diaphragm and reservoir cap.

### NOTICE

**Brake fluid quickly ruins painted surfaces. Wipe up any spilled fluid immediately.**

### NOTE

- First, tighten the rear brake fluid reservoir cap clockwise by hand until slight resistance is felt indicating that the cap is seated on the reservoir body, then tighten the cap an additional 1/6 turn while holding the brake fluid reservoir body.



- A. Rear Brake Fluid Reservoir
- B. Reservoir Cap
- C. Clockwise
- D. 1/6 turn

## 18 PREPARATION

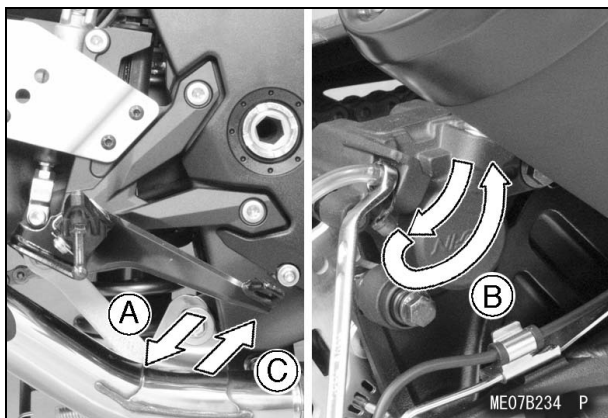
- Operate the brake pedal several times.
- If it feels spongy, there might be air in the brake line.
- If necessary, bleed the air in the rear brake line.
- Also check for fluid leakage around the fittings.

### Rear Brake Line Air Bleeding

- Loosen the reservoir cap stopper screw to remove the rear brake reservoir cap and diaphragm, and check that there is plenty of fluid in the reservoir.

#### NOTE

- *The fluid level must be checked several times, during the bleeding operation and replenished as necessary. If the fluid in the reservoir runs completely out any time during bleeding, the bleeding operation must be repeated from the beginning since air will have entered the line.*
- Attach a clear plastic hose to the bleed valve on the rear brake caliper and run the other end of the hose into a container.
- With the reservoir cap off, slowly pump the brake pedal several times until no air bubbles can be seen rising up through the fluid from the holes at the bottom of the reservoir. This bleeds the air from the rear brake master cylinder end of the line.
- Pump the brake pedal a few times until it becomes hard and then, holding the pedal pushed down, quickly open (turn counter-clockwise) and close the bleed valve. Then release the pedal. Repeat this operation until no more air can be seen coming out into the plastic hose.



- A.** Hold the brake pedal applied.
- B.** Quickly open and close the bleed valve on the rear brake caliper.
- C.** Release the brake pedal.

- When air bleeding is finished, check that the fluid level is between the upper and lower level lines.
- Tighten the bleed valve to the specified torque.

**Torque: 7.8 N·m (0.80 kgf·m, 69 in·lb)**

- Reinstall the diaphragm and reservoir cap.

#### NOTE

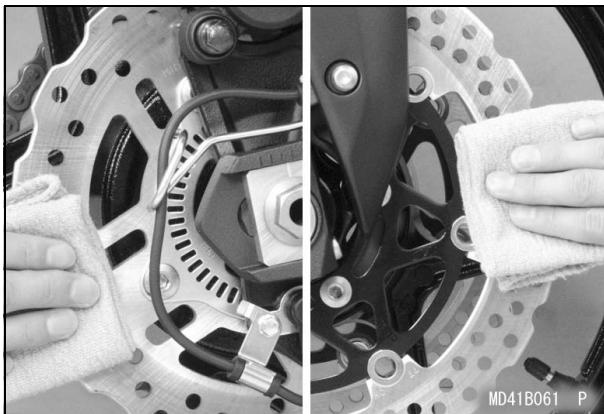
- *First, tighten the rear brake fluid reservoir cap clockwise by hand until slight resistance is felt indicating that the cap is seated on the reservoir body, then tighten the cap an additional 1/6 turn while holding the brake fluid reservoir body.*
- Tighten the reservoir cap stopper screw.
- Apply the brake forcefully for a few seconds, and check for fluid leakage around the fittings.

### Brake Disc Cleaning

- Clean the front and rear brake discs using oilless solvent.

#### ⚠ WARNING

**An anticorrosive treatment applied to the brake discs will increase braking distance and can cause an accident resulting in serious injury or death. Remove the anticorrosive treatment using an oilless solvent.**



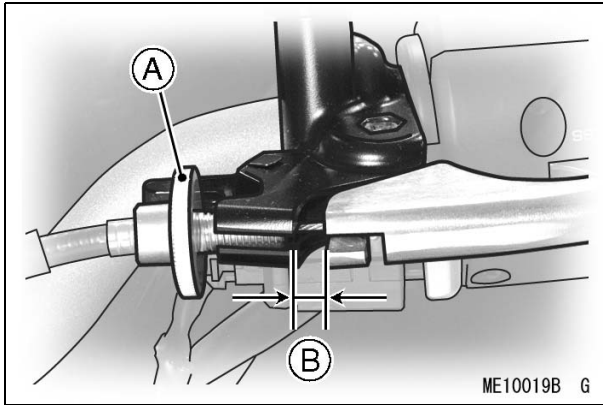
### Clutch Lever and Cable

#### Clutch Lever Free Play Inspection

- Check that the clutch lever has the specified amount of free play as shown in the figure.

#### Clutch Lever Free Play:

**2 ~ 3 mm (0.08 ~ 0.12 in.)**



**A. Adjuster**

**B. Free Play: 2 ~ 3 mm (0.08 ~ 0.12 in.)**

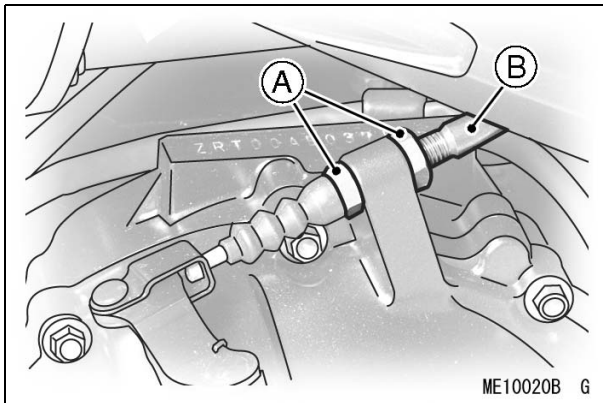
- If the free play is incorrect, adjust the free play.

#### NOTE

- Before checking the clutch lever free play, make sure that the gap between clutch lever holder and adjuster is 4 ~ 6 mm (0.16 ~ 0.24 in.).

#### Clutch Lever Free Play Adjustment

- Turn the adjuster so that the clutch lever will have 2 ~ 3 mm (0.08 ~ 0.12 in.) of free play.
- If it cannot be done at the clutch lever, use the adjusting nuts on the lower end of the clutch cable.



**A. Adjusting Nuts**

**B. Clutch Cable**

#### NOTE

- After the adjustment is made, start the engine and check that the clutch does not slip and that it releases properly.
- For minor corrections, use the adjuster at the clutch lever.

## Drive Chain

### Drive Chain Slack and Wheel Alignment Inspection

- Set the motorcycle up on its side stand.
- Make sure that the drive chain has the specified amount of play, and that the left and right notches are on the same marks or points on the left and right of the swingarm.

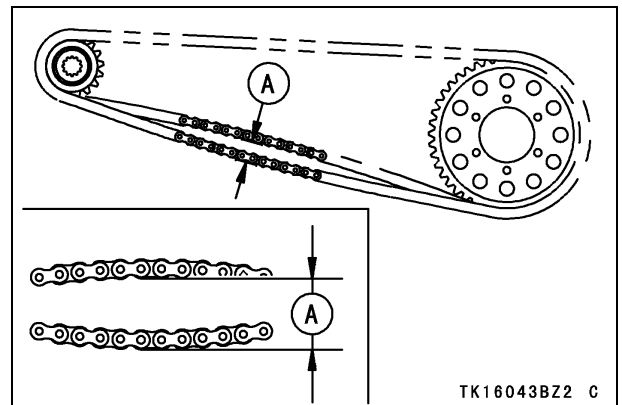
#### ⚠ WARNING

**Misalignment of the wheel will result in abnormal tire wear and can cause an unsafe riding condition. Be sure the wheel is properly aligned.**

- Rotate the rear wheel to find the position where the chain is tightest, and measure the maximum chain slack by pulling up and pushing down the chain midway between the engine sprocket and rear sprocket.

#### Drive Chain Slack:

**30 ~ 40 mm (1.2 ~ 1.6 in.)**



**A. 30 ~ 40 mm (1.2 ~ 1.6 in.)**

- If the drive chain is too tight or too loose, adjust it so that the chain slack will be within the standard value.

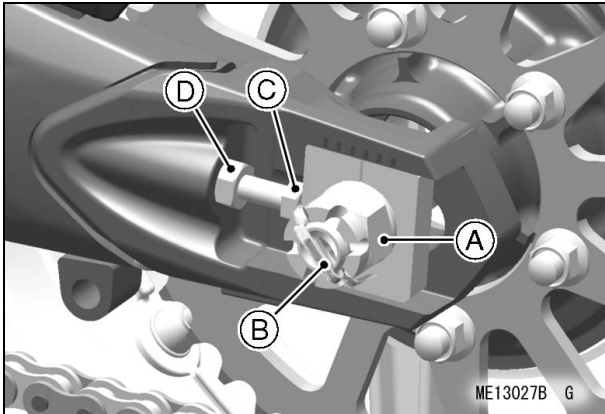
#### ⚠ WARNING

**A chain that breaks or jumps off the sprockets could snag on the engine sprocket or lock the rear wheel, severely damaging the motorcycle and causing it to go out of control. Inspect the chain for damage and proper adjustment.**

### Drive Chain Slack Adjustment

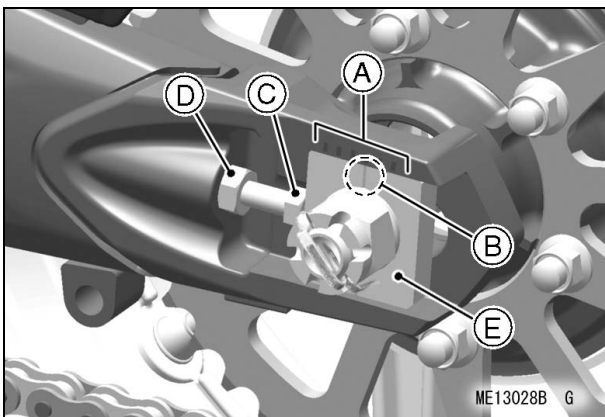
- Remove the cotter pin, and loosen the rear axle nut.
- Loosen the left and right chain adjuster lock-nuts.

## 20 PREPARATION



- A. Rear Axle Nut
- B. Cotter Pin
- C. Drive Chain Adjuster (Left and Right)
- D. Drive Chain Adjuster Locknut (Left and Right)

- If the chain is too loose, turn in the left and right chain adjusters evenly.
- If the chain is too tight, turn out the left and right chain adjusters evenly.
- Turn both chain adjusters evenly until the drive chain has the correct amount of slack. To keep the chain and wheel properly aligned, the wheel alignment indicator notches should align with the same marks on each side of the swingarm.



- A. Marks
- B. Notch
- C. Drive Chain Adjuster (Left and Right)
- D. Drive Chain Adjuster Locknut (Left and Right)
- E. Indicator

### NOTE

- Wheel alignment can also be checked using the straightedge or string method.

- Tighten both chain adjuster locknuts.
- Tighten the rear axle nut to the specified torque.

**Torque: 108 N·m (11.0 kgf·m, 80 ft·lb)**

- Rotate the wheel, measure the chain slack again at the tightest position, and readjust if necessary.

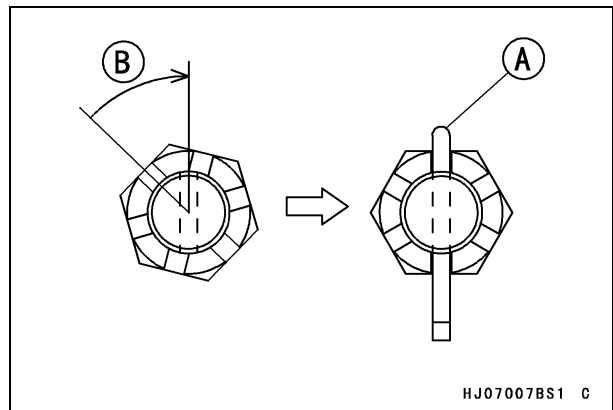
### ⚠ WARNING

**A loose axle nut can lead to an accident resulting in serious injury or death. Tighten the axle nut to the proper torque and be sure the cotter pin is installed correctly.**

- Check the wheel alignment.
- Install a new cotter pin.

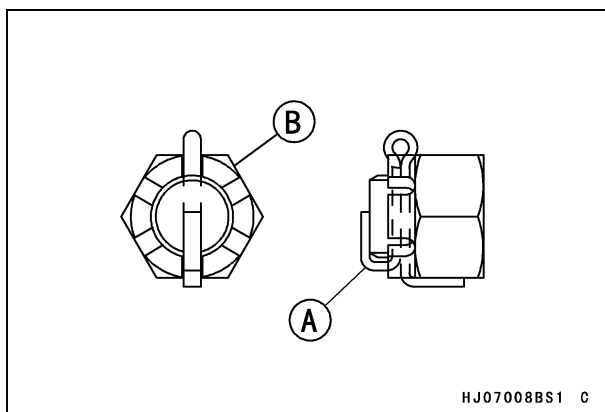
### NOTE

- When inserting the cotter pin, if the slots in the nut do not align with the cotter pin hole in the axle, tighten the nut clockwise up to the next alignment.
- It should be within 30 degrees.
- Loosen once and tighten again when the slot goes past the nearest hole.



- A. Cotter Pin
- B. Turning Clockwise

- Bend the cotter pin over the nut.



**A. Cotter Pin**  
**B. Nut**

- Check the rear brake effectiveness.

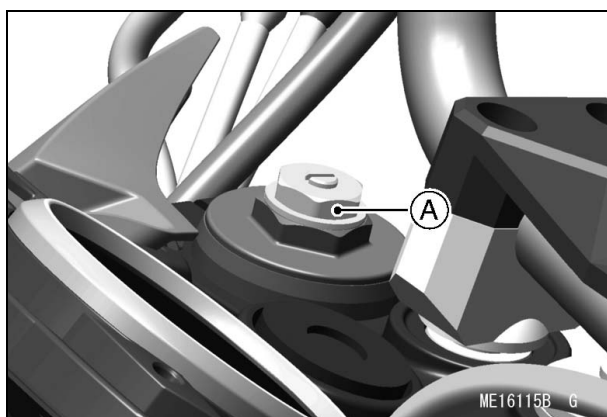
## Front Fork

### Spring Preload Adjustment

- Check the position of the spring preload adjusters on the left and right fork legs.

### STD Spring Preload:

**6 turns in (Clockwise from the fully loosed position)**



**A. Spring Preload Adjuster**

- Turn in the spring preload adjusters to increase spring force and out to decrease spring force. Adjust the spring preload to the standard setting position.

### NOTICE

**The right and left fork tubes must be adjusted evenly.**

### ⚠ WARNING

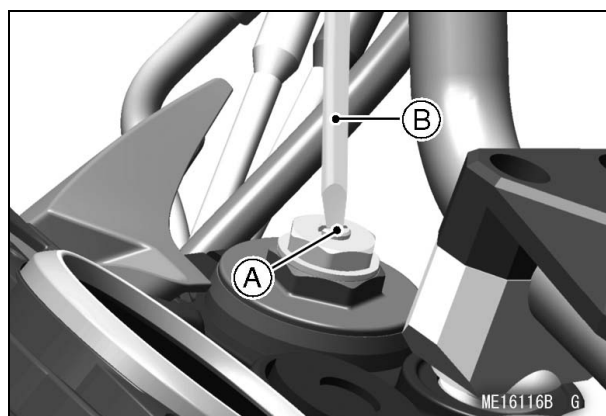
If both spring preload adjusters and both rebound and compression damping adjusters are not adjusted equally, handling may be impaired and a hazardous condition may result. Set all suspension adjusters equally to the recommended settings.

### Rebound Damping Adjustment

- Check the position of the rebound damping adjusters on the left and right fork legs.

### STD Rebound Damping:

**1 1/4 turns out (Counterclockwise from the fully seated position)**



**A. Rebound Damping Adjuster**  
**B. Screwdriver**

- To adjust the rebound damping, turn the adjuster with a screwdriver. Adjust the rebound damping to the standard setting position.

### NOTICE

**The right and left fork legs must be adjusted evenly.**

### NOTICE

**Do not force to turn the rebound damping adjuster from the fully seated position or the adjusting mechanism may be damaged.**

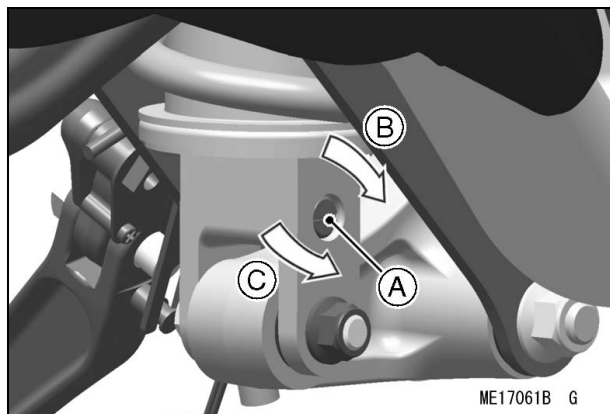
## Rear Shock Absorber

### Rebound Damping Adjustment

- Check the position of the rebound damping adjuster at the lower end of the rear shock absorber.

### STD Rebound Damping:

1 1/2 turns out (Counterclockwise from the fully seated position)



**A. Rebound Damping Adjuster**

**B. To increase damping force**

**C. To decrease damping force**

- Turn the rebound damping adjuster all the way clockwise to make the damping force greatest.
- Turn the rebound damping adjuster counterclockwise to decrease damping force.
- To adjust the rear shock absorber rebound damping, turn the rebound damping adjuster with a screwdriver. Adjust the rebound damping to the standard setting position.

### NOTICE

**Do not force to turn the rebound damping adjuster from the fully seated position or the adjusting mechanism may be damaged.**

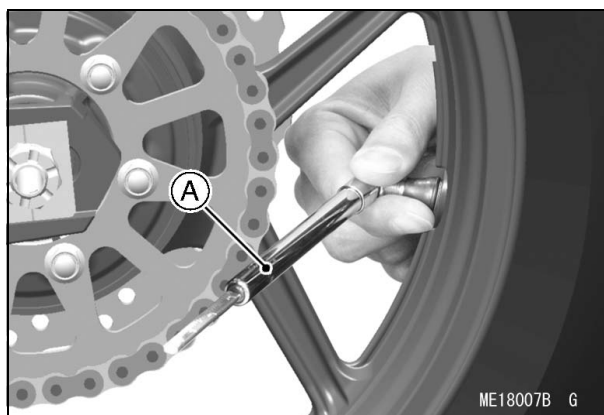
## Tire Air Pressures

- To prevent flat-spotting during shipment, the tires are over-inflated before crating. Adjust the pressures to the specified values in the front and rear, and make sure to tighten the caps securely.

### Tire Air Pressure [when cold]:

**Front: 250 kPa (2.50 kgf/cm<sup>2</sup>, 36 psi)**

**Rear: 290 kPa (2.90 kgf/cm<sup>2</sup>, 42 psi)**



**A. Tire Air Pressure Gauge**

## Fuel

### ⚠ WARNING

Gasoline is extremely flammable and can be explosive under certain conditions, creating the potential for serious burns. Turn the ignition switch "OFF". Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light. Never fill the tank completely to the top. If the tank is filled completely to the top, heat may cause the fuel to expand and overflow through the vents in the tank cap. After refueling, make sure the tank cap is closed securely. If gasoline is spilled on the fuel tank, wipe it off immediately.

- Open the fuel tank cap, and check for debris in the fuel tank.
- Fill the fuel tank with one gallon or four liters of unleaded gasoline. Use a gasoline with a minimum octane rating shown below. Use clean, fresh unleaded gasoline with an octane rating equal to or higher than that shown in the table.

Fuel Type	Unleaded Gasoline
Minimum Octane Rating	Research Octane Number (RON) 91

- Close the fuel tank cap, and check for any leaks.



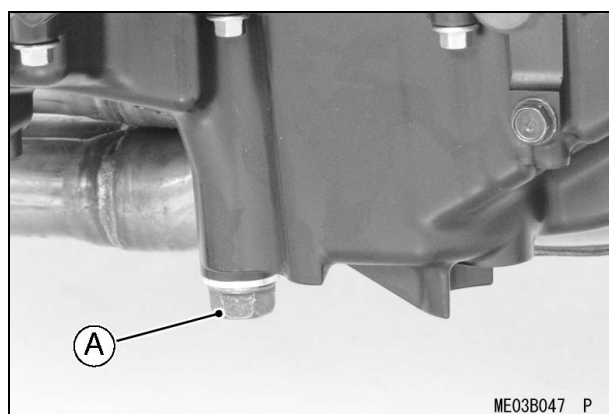
## Engine Oil (4-stroke)

### Engine Oil Level Inspection

#### NOTE

- This vehicle's engine is filled with 10W-40 oil from the factory. **DO NOT DRAIN** and refill the crankcase before use. Check oil level and drain plug tightness.

**Engine Oil Drain Plug Torque:**  
29 N·m (3.0 kgf·m, 21 ft·lb)



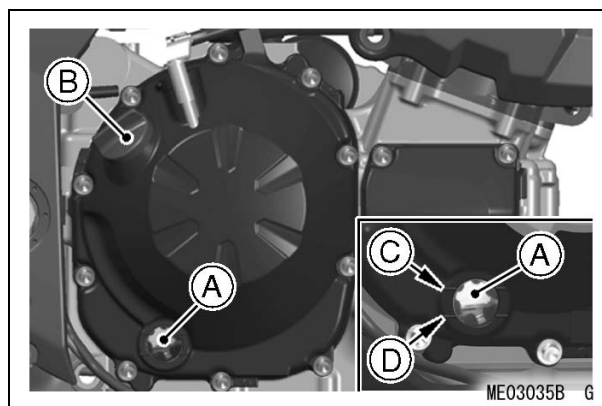
#### A. Engine Oil Drain Plug

- Park the vehicle on level ground.
- Before starting the engine, check that the engine has oil.
- With the motorcycle held level, check that the engine has oil through the oil level sight gauge in the lower right side of the engine.

#### NOTICE

**If the engine is run without oil, it will be severely damaged.**

- Start the engine and run it for several minutes at idle speed. Stop the engine, then wait several minutes until the oil settles.
- With the motorcycle held level, check the engine oil level through the oil level sight gauge. The oil level should come up between the upper and lower level lines next to the gauge.



#### A. Oil Level Sight Gauge

#### B. Oil Filler Cap

#### C. Upper Level Line

#### D. Lower Level Line

- If the oil level is too high, remove the excess oil through the oil filler opening, using a syringe or some other suitable device.
- If the oil level is too low, add oil to reach the correct level. Use the same type of oil that is already in the engine.
- When replacing the cap, be sure the O-ring is in place, and tighten the cap in finger tight.

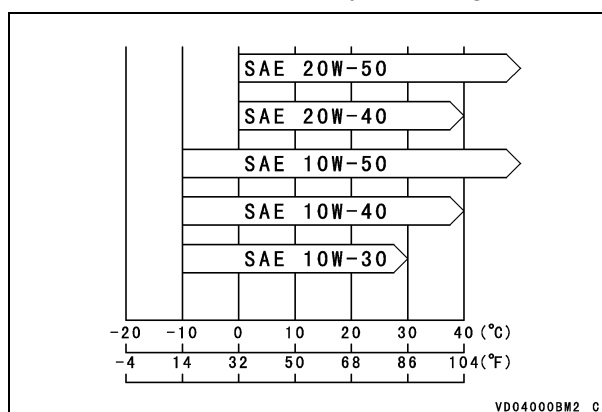
### Recommended Engine Oil

**Type:** API SG, SH, SJ, SL or SM with JASO MA, MA1 or MA2

**Viscosity:** SAE 10W-40

**Capacity:** 3.1 L (3.3 US qt)  
[when filter is not removed]  
3.3 L (3.5 US qt)  
[when filter is removed]

Although 10W-40 engine oil is the recommended oil for most conditions, the oil viscosity may need to be changed to accommodate atmospheric conditions in your riding area.



## Throttle Grip and Cable

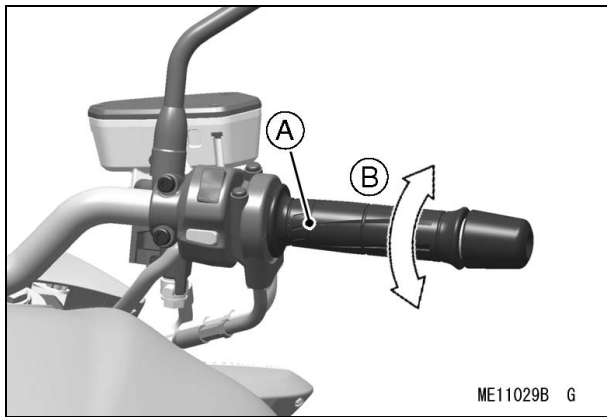
### Throttle Grip Free Play Inspection

- Inspect the throttle grip free play. If the free play is incorrect, adjust the throttle cables.

### Throttle Grip Free Play:

2 ~ 3 mm (0.08 ~ 0.12 in.)

- Check that the throttle grip moves smoothly from full open to close, and the throttle closes quickly and completely in all steering positions by the return spring. If the throttle grip does not return properly, check the throttle cable routing, grip free play, and for possible cable damage. Then lubricate the throttle cables.



#### A. Throttle Grip

B. 2 ~ 3 mm (0.08 ~ 0.12 in.)

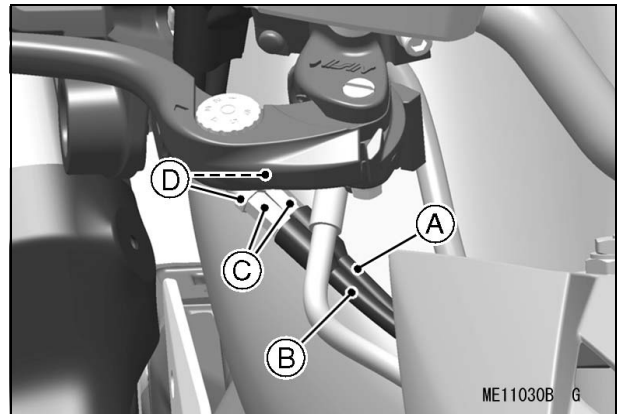
- Run the engine at idle speed, and turn the handlebar all the way to the right and left to ensure that the idle speed does not change. If the idle speed increases, check the throttle grip free play.

### **⚠ WARNING**

Operation with incorrectly routed, improperly adjusted or damaged cables could result in an unsafe riding condition. Be sure the cables are routed correctly, properly adjusted and are not damaged in any way.

### Throttle Grip Free Play Adjustment

- Loosen both locknuts of the throttle cables and turn both adjusters in completely to give the throttle grip plenty of play.
- Turn out the decelerator cable adjuster until there is no play when the throttle grip is completely closed. Tighten the locknut.



#### A. Decelerator Cable

#### B. Accelerator Cable

#### C. Adjusters

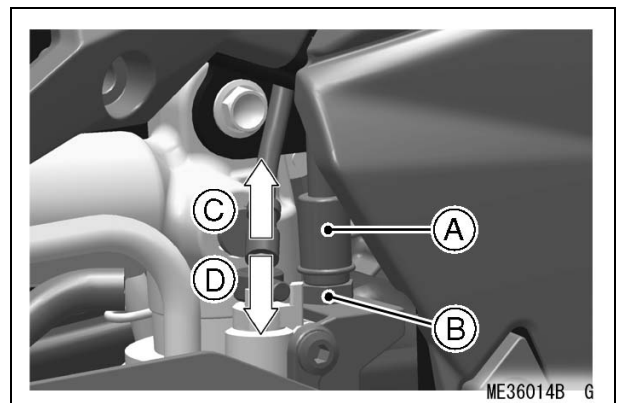
#### D. Locknuts

- Turn out the accelerator cable adjuster until the specified amount of play is obtained. Tighten the locknut.

## Rear Brake Light Switch

### Rear Brake Light Switch Adjustment

- Turn on the ignition switch. The brake light should illuminate when the brake pedal is depressed about 10 mm (0.4 in.)
- If it does not, turn the adjusting nut at the rear brake light switch as required.
- To adjust the rear brake light switch, move the switch up or down by turning the adjusting nut.



#### A. Rear Brake Light Switch

#### B. Adjusting Nut

#### C. Lights sooner

#### D. Lights later

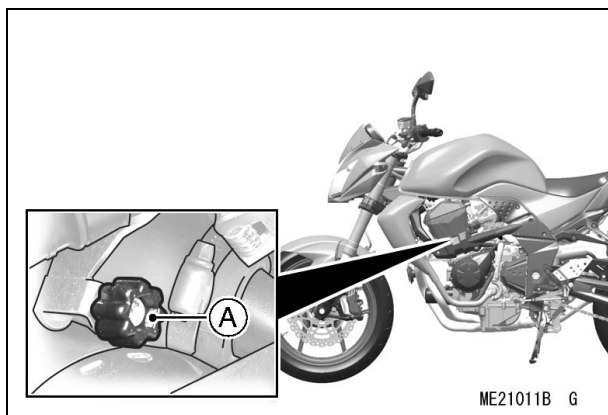
### **NOTICE**

To avoid damaging the electrical connections inside the switch, be sure that the switch body does not turn during adjustment.

## Idle Speed Adjustment

- Start the engine and warm it up thoroughly.
- Adjust the idle speed to 1 050 ~ 1 150 r/min (rpm) by turning the idle adjusting screw.

**Idle Speed: 1 050 ~ 1 150 r/min (rpm)**



### A. Idle Adjusting Screw

- Open and close the throttle grip a few times to make sure that the idle speed does not change.
- With the engine idling, turn the handlebar to each side. If handlebar movement changes the idle speed, check the throttle cable routing and free play.

### **⚠ WARNING**

**Operation with incorrectly routed or damaged throttle cable could result in an unsafe riding condition. Be sure the throttle cable is routed correctly, properly adjusted and is not damaged in any way.**

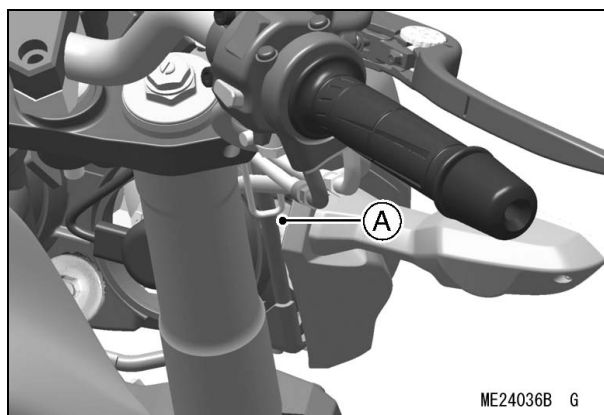
- Check for any exhaust leaks and correct if necessary.

## Headlight Aim

The headlight beam is adjustable both horizontally and vertically. Headlight aim must be correctly adjusted for safe riding as well as on-coming drivers. In most areas it is illegal to ride with improperly adjusted headlights.

### *Horizontal Adjustment*

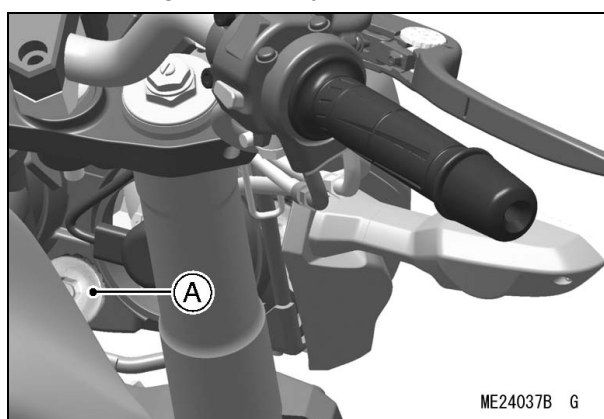
- Turn the horizontal adjuster in or out until the beam points straight ahead.



### A. Horizontal Adjuster

### *Vertical Adjustment*

- Turn the vertical adjuster in or out to adjust the headlight vertically.



### A. Vertical Adjuster

### **NOTE**

- On high beam, the brightest point should be slightly below horizontal with the motorcycle on its wheels and the rider seated. Adjust the headlight to the proper angle according to local regulation.

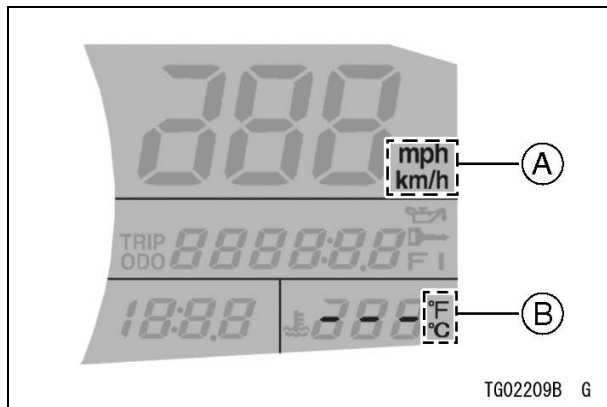
## Digital Meter

### **Check the Unit Setting: mph, km/h**

The mph·km/h display can alternate between English and metric modes (mph and km/h) in the digital meter. Make sure that mph or km/h according to local regulations is correctly displayed before sale.

- Turn the ignition switch ON.
- Display the odometer in the digital meter.
- The mph·km/h (or °F/°C temperature) display shifts by pushing the RESET button while the MODE button pushed in.

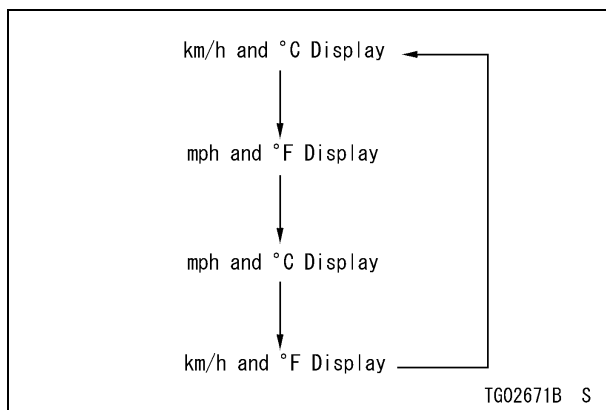
## 26 PREPARATION



### A. mph·km/h Display

### B. °F /°C Display

- The mph·km/h (and °F/°C temperature) display shifts as follows.



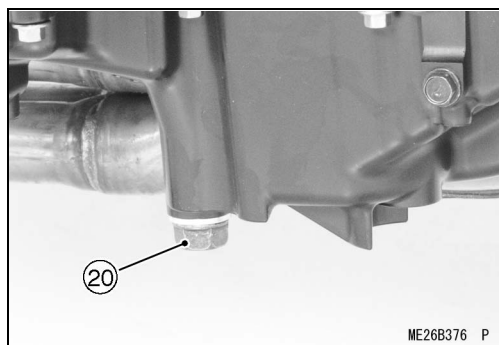
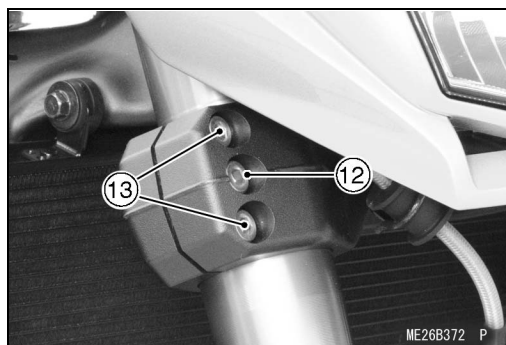
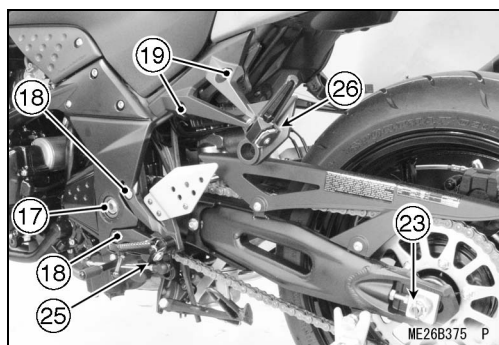
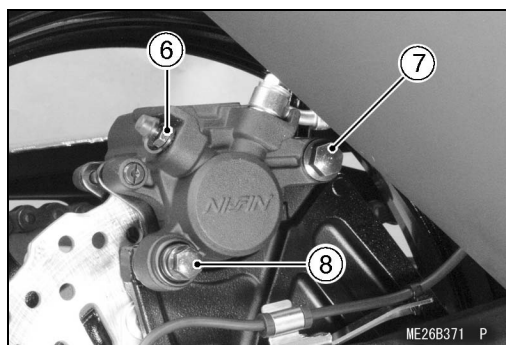
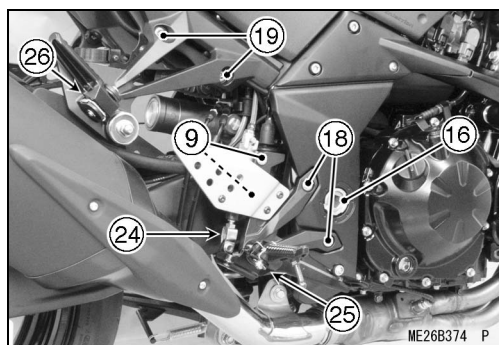
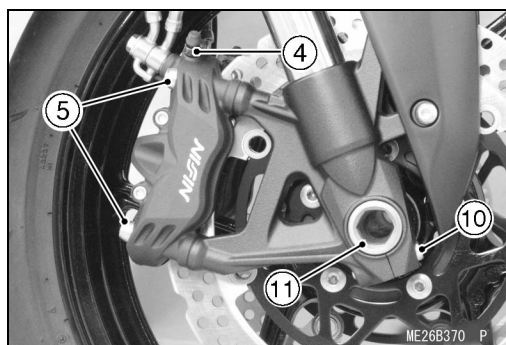
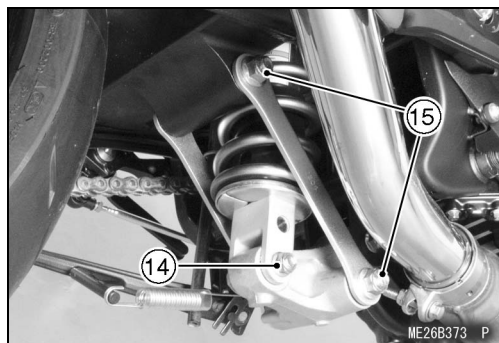
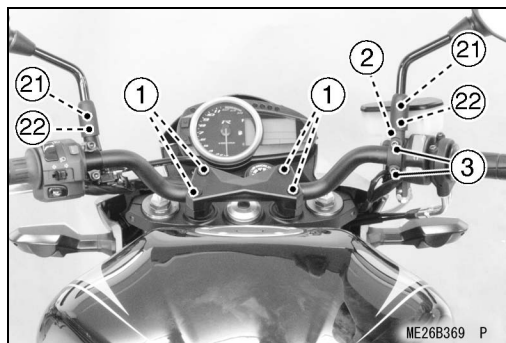
### NOTE

- *The data is maintained even if the battery is disconnected.*

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## Fastener Check

- The torque values listed are for assembly and preparation items only, see the appropriate Service Manual for a more comprehensive list. Check tightness of all fasteners that are in the table before retail delivery. Also check to see that each cotter pin or circlip is in place.



No.	Fastener	Torque			Remarks
		N·m	kgf·m	ft·lb	
Steering					
1	Handlebar clamp bolt	25	2.5	18	S
Brake					
2	Front master cylinder bleed valve	7.8	0.80	69 in·lb	
3	Front master cylinder clamp bolt	11	1.1	97 in·lb	S
4	Front caliper bleed valve (Left and Right)	7.8	0.80	69 in·lb	
5	Front caliper mounting bolt (Left and Right)	34	3.5	25	
6	Rear caliper bleed valve	7.8	0.80	69 in·lb	
7	Rear caliper mounting bolt	27	2.8	20	
8	Rear caliper pin bolt	22	2.2	16	
9	Rear master cylinder mounting bolt	25	2.5	18	
Wheels					
10	Front axle clamp bolt (Right)	20	2.0	15	
11	Front axle	127	13.0	94	
Suspension					
12	Front fork lower clamp bolt (Middle, Left and Right)	17.5	1.78	13	
13	Front fork lower clamp bolt (Upper, Lower, Left and Right)	25	2.5	18	AL
14	Rear shock absorber mounting nut (Lower)	34	3.5	25	
15	Tie-rod nut	59	6.0	44	
16	Swingarm pivot shaft locknut	98	10	72	
17	Swingarm pivot shaft nut	108	11.0	80	
Others					
18	Front footpeg bracket bolt (Left and Right)	25	2.5	18	
19	Rear footpeg bracket bolt (Left and Right)	25	2.5	18	
20	Engine oil drain plug	29	3.0	21	
21	Rear view mirror upper hexagonal area (Left and Right)	18	1.8	13	
22	Rear view mirror lower hexagonal area (Left and Right)	30	3.1	22	
Cotter Pins or Circlips					
23	Rear axle nut cotter pin	—	—	—	
24	Rear master cylinder rod cotter pin	—	—	—	
25	Front footpeg pin circlip (Left and Right)	—	—	—	
26	Rear footpeg pin circlip (Left and Right)	—	—	—	

**AL:** Tighten the two clamp bolts alternately two times to ensure even tightening torque.

**S:** Tighten the upper/front clamp bolt first, and then the lower/rear clamp bolt.

## Standard Torque Table

This table relating tightening torque to thread diameter, lists the basic torque for bolts and nuts. Use this table for only the bolts and nuts which do not require a specific torque value. All of the values are for use with dry solvent-cleaned threads.

### General Fasteners

Threads dia. (mm)	Torque		
	N·m	kgf·m	ft·lb
5	3.4 ~ 4.9	0.35 ~ 0.50	30 ~ 43 in·lb
6	5.9 ~ 7.8	0.60 ~ 0.80	52 ~ 69 in·lb
8	14 ~ 19	1.4 ~ 1.9	10.0 ~ 13.5
10	25 ~ 34	2.6 ~ 3.5	19.0 ~ 25
12	44 ~ 61	4.5 ~ 6.2	33 ~ 45
14	73 ~ 98	7.4 ~ 10.0	54 ~ 72
16	115 ~ 155	11.5 ~ 16.0	83 ~ 115
18	165 ~ 225	17.0 ~ 23.0	125 ~ 165
20	225 ~ 325	23.0 ~ 33.0	165 ~ 240

## Test Ride the Motorcycle

- Complete the test ride checklist.

### Control Cables:

Throttle control cables must work without binding in any steering position.

### Steering:

Action is free from lock-to-lock.

### Suspension:

Check operation front and rear.

### Engine:

Electric starter works properly and engine starts promptly. Good throttle response and return.

### Transmission and Clutch:

Smooth operation.

### Brakes:

Adequate, smooth stopping power, No drag.

### Digital Meter:

Check operation

### Electrical System:

Headlight - check high and low beams.

Taillight - check operation.

Brake Light - check operation.

Turn Signal Lights - check operation.

Horn - check operation.

Instrument Lights and Indicator Lights -

Check operation.

### Engine Stop Switch Works:

### Starter Interlock Switch Works:

### No Unusual Noises:

### No Fuel, Oil, Brake Fluid, or Coolant Leaks:

PREPARATION COMPLETE.

## WARNING

New tires are slippery and may cause loss of control and serious injury or death. A break-in period of 160 km (100 miles) is necessary to establish normal tire traction. During break-in, avoid sudden and maximum braking, acceleration, and hard cornering.

## A & P Check List

- Complete the A & P Check List.





### MODEL APPLICATION

Year	Model	Name
2011	ZR750NBF	Z750R
2011	ZR750PBF	Z750R ABS



KAWASAKI HEAVY INDUSTRIES, LTD.  
Motorcycle & Engine Company

**Part No. 99939-1333-01**